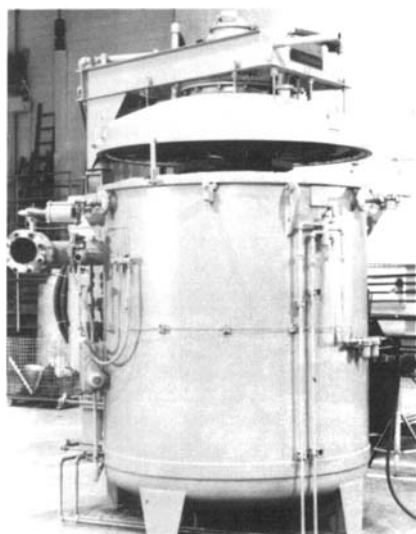


**Lindberg Corp.**, Watertown, Wisconsin: *New top-loading pit vacuum furnace produces clean, bright work without decarburization*; graphite heating elements for



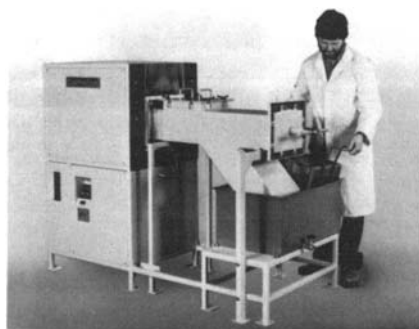
Lindberg Corp.

maximum 1750 °F temperature; loads up to 6000 lb gross; vacuum level  $10^{-2}$   $\mu$ m at 1700 °F; power output 75 kW. Circle 79

**Wall Colmonoy Corp.**, Madison Heights, Michigan: *Stainless steel T-specimens test quality of furnace brazing conditions*; 304 stainless sheet-metal strip; use in any nonoxidizing, low-dewpoint furnace atmosphere (-40 °F/-40 °C, or drier), such as vacuum, pure dry hydrogen, dissociated ammonia, nitrogen, argon; indicate problems with base metal, brazing filler metal, atmosphere; targets occurrence; QC inspection inside furnace. Circle 80

**Custom Electric Manufacturing Co.**, Detroit, Michigan: *Electric heating elements handbook*; standard circuit/conversion formulas; complete technical/metallurgical information of variety of electric heating elements with operating temperatures from 200 to 3500 °F. Circle 81

**Carbolite Furnaces**, Watertown, Wisconsin: *New, small-scale, sealed quench furnace cost-effective for low throughputs*; high-quality heat treating; 8 (H)  $\times$  11 (W)  $\times$  12 (D) in.; gastight liner 20 gal oil



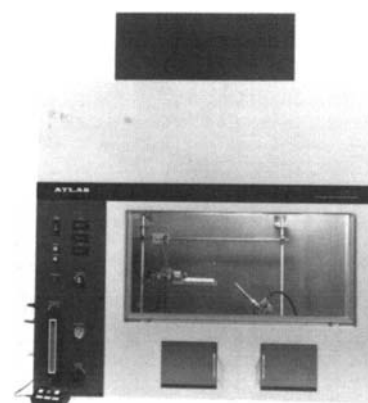
Carbolite Furnaces

quench tank; resistance wire elements give maximum temperature of 1100 °C; micro-processor controlled. Circle 82

**Procedyne Corp.**, New Brunswick, New Jersey: *New line of temperature indirect gas-fired process gas heaters, Slot Jet Process Gas Heaters, reach temperatures previously unavailable in compact units*; up to 1994 °F (1090 °C); ceramic baffle arrangement achieves heat transfer coefficients three to five times others; modular construction for increasing heat transfer area by adding sections; standard Inconel 601 on process gas side. Circle 83

**Tocco**, Boaz, Alabama: *New heavy-duty, high-production induction scanner, TOCCOtol® 350, for large parts*; gears, automotive/truck axle shafts, camshafts, turbine engine main shafts, related component; one, two, four spindles for scan hardening and lift/rotate operation; lengths up to 60 in.; single spindle 300 lb capacity; audio/radio frequency heating applications; piloted quick-change inductor simplify setup/operation. Circle 84

**Atlas Electric Devices Co.**, Chicago, Illinois: *New bench-top flame chamber, HVUL Horizontal Vertical Flame Chamber, meets all five UL 94 (flammability testing of plastic materials/parts) horizontal/vertical tests*; large volume, draft-free chamber; multi-axis specimen burning apparatus for unmatched accuracy in positioning parts for reproducible results; quick-release burner mounting for safe hand manipulation of nonrigid materials; meets variety of international tests, including ASTM D 635, 3802, 4804, 4986, 5048, and ISO 1210, 9772.3, 9773, and

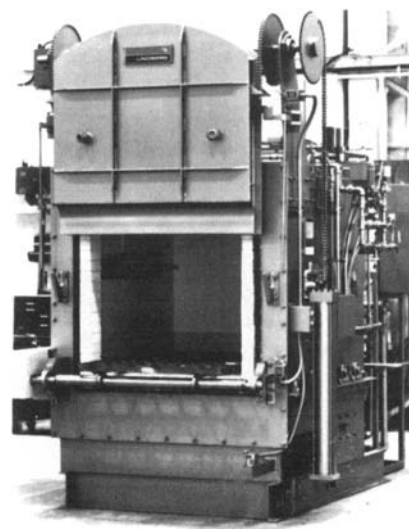


Atlas Electric Devices Co.

10351 IEC 707; variety of safety features are standard. Circle 85

**Rath Performance Fibers, Inc.**, Wilmington, Delaware: *New composite roof design, Composite Insulation Module, improves ultrahigh temperature furnace construction*; greater strength eliminates roof sagging at 1600 to 1800 °C; Kera-setter® structural board/ALTRA®KVS insulating board laminated with FIBER-PLAST® moldable ceramic fiber; eliminates complex, costly alumina support rod suspension systems; easier design/construction. Circle 86

**Lindberg**, Watertown, Wisconsin: *Furnace system burns-off polymers/organic*



Lindberg

*components from metallic tooling*; residual polymer reduced to easily disposed ash at just-below material critical flash point; exhaust afterburner eliminates toxic gases; 36 (W) × 48 (D) × 30 (H) in. work space; maximum operating temperature 1250 °F. Circle 87

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**Magnatech, Inc.**, Bettendorf, Louisiana: *More powerful line frequency magnetic field heater, JH-100/250 Industrial Heater, treats large parts at shorter cycle times*; twice the power; larger core opening accommodates up to 250 mm (10 in.) (H) parts; JH-150/500 unit heats parts up to 18 in. (H); three-sided accessibility; designed for long, continuous operation. Circle 88

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Lindberg

**Lindberg**, Watertown, Wisconsin: *New atmosphere-control system Model*

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*59013-3FM, provides semiautomatic control of gases in processing*; hydrogen process gas, a nitrogen purge gas, a 96% nitrogen/4% hydrogen forming gas; sequential push button/indicator light operation; two direct-reading adjustable flowmeters. Circle 89

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**Gammatronix, Inc.**, Dublin, Ohio: *World's highest capacity/safest heat treating machine, Model 690M, provides controlled-current output to six separate computer-controlled zones for stress-relief application*; zones programmable up to 15 separate patterns/60 segments per pattern; overshoot suppression during temperature cycles; measurement accuracy of ±0.2%. Circle 90

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